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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,835

11/13/2003

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EXAMINER

CONNOLLY, MARK A

ART UNIT

PAPER NUMBER

2115

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/705,835		Applicant(s) MORISAWA, TOSHIKAZU	
	Examiner Mark Connolly		Art Unit 2115	
	-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --			

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 19 December 2006.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-17 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-4, and 6-17 have been presented for examination.
2. Applicant's arguments with respect to claims 1-4 and 6-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Lines 9-10 refer to “the time information set by the time setting unit” whereas in lines 4-5 the time information from the time setting unit is referred to a “time *zone* information.” For examination purposes the “time information” on lines 9 and 10 is interpreted as “time zone information.” Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-3, 7-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara¹ in view of Thelander et al. [Thelander] PG PUB 2003/0009705 A1.
6. Referring to claim 1, Sugahara teaches the apparatus comprising:
 - a. an operating mode setting unit configured to set the operation modes [col. 5 lines 43-48].
 - b. a time setting unit configured to set time information for carrying out each operation mode [col. 12 lines 46-50]. In particular, Sugahara teaches managing the setting and management of the power save modes. It is therefore interpreted that the

¹ As cited in the previous office action.

server comprises a time setting unit for setting times associated with the different operation modes. This interpretation is further apparent in fig. 11 wherein the different clients set different operating modes at different times. This leads to the interpretation that the scheduling of the different operation modes are not static and that different operation modes are set in accordance with a time deemed to be appropriate.

c. an operation mode acquisition and determination unit configured to acquire a current operation mode and to determine whether the current operation mode corresponds to a desired operation mode, based upon the time information set by the time setting unit and current time [col. 6 line 66- col. 7 line 8 and col. 7 lines 20-28]. In particular, when changing over to a scheduled power save operation mode, status information is received representing a current operation mode. If it is determined that the current operation mode does not correspond to a desired operation mode (i.e. the scheduled power save operation mode) a reissue of the power save mode control is made to change to the desired power save operation mode. By definition, a scheduled event occurs when a current time reaches a preset time.

d. a control unit configured to carry out an operation mode changeover to change to the desired operation mode if the determination unit determines that the current operation mode does not correspond to the desired operation mode [col. 5 lines 60-63 and col. 7 lines 13-19].

Although Sugahara teaches the operation mode setting unit, acquisition and determination unit and control unit, Sugahara does not explicitly teach a time setting unit that is included in the electronic apparatus for setting time zone information based on an input from a

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user for carrying out each operation of the electronic apparatus. In summary, Sugahara teaches scheduling operation modes for the apparatus through a secondary computer coupled to the apparatus via network rather than scheduling operation modes locally at the apparatus.

Thelander teaches a system wherein a user can set time zone information for scheduling operation modes of a computer which can be performed locally [figs. 4-5 and 10-11 and ¶s 0045-0046, 0048 and 0063]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Sugahara system to include the operation mode scheduling in Thelander to allow a user to set time zone information locally rather than remotely (i.e. for carrying out each operation mode of the apparatus) because it would provide means to incorporate the improved power management in additional systems such standalone computers as taught by Thelander.

7. Referring to claim 2, Thelander teaches when operating in a first normal operating mode (i.e. day scheme), turning a monitor off after the system has not been actively used for 20 minutes [935 fig. 10]. In addition, when operating in a second power saving operation mode (i.e. night scheme), the monitor is turned off after the system has not been actively used for 5 minutes [fig 11].

8. Referring to claim 3, Thelander teaches when operating in a first operating mode (i.e. day scheme), turning a hard disk off after the system has not been actively used for 30 minutes [937 fig. 10]. In addition, when operating in a second operation mode (i.e. night scheme), the hard disk is turned off after the system has not been actively used for 5 minutes [fig 11].

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9. Referring to claim 7-9, these are rejected on the same basis as set forth hereinabove.

Furthermore, the Sugahara-Thelander system teaches selecting one of a plurality of power saving modes to execute in accordance with a scheduled time [Thelander: 447 and 449 fig. 5].

10. Referring to claims 13-16, these are rejected on the same basis as set forth hereinabove.

Sugahara teaches the apparatus and therefore teaches the method performed by the apparatus and program implementing the functionality of the apparatus.

11. Claims 4, 6, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara and Thelander as applied to claims 1-3, 7-9 and 13-16 above, and further in view of Nakai².

12. Referring to claims 4, 6, 10 and 12, although Sugahara and Thelander teach operating in lower power modes during scheduled times, it is not explicitly taught how the system reduces its power consumption in relation to optical disk drives. Nakai explicitly teaches that power can be conserved in a power saving mode by reducing a disk rotation speed [col. 18 lines 12-20].

Because Sugahara and Thelander is concerned with adjusting a systems power consumption in accordance with a schedule, it would have been obvious to one of ordinary skill in the art to reduce a disk rotation speed during a power save mode so that power consumption can be minimized.

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara and Thelander as applied to claims 1-3, 7-9 and 13-16 above, and further in view of Yamanaka³.

² As cited in the previous office action.

14. Referring to claim 11, although Sugahara and Thelander teach operating in lower power modes during scheduled times, it is not explicitly taught how the system reduces its power consumption in relation to a processor and its cooling fan. Yamanaka explicitly teaches conserving power by throttling a processor speed rather than running a processor fan [abstract]. Because Sugahara and Thelander is concerned with adjusting a systems power consumption in accordance with a schedule, it would have been obvious to one of ordinary skill in the art to cool a processor via fan during times where power saving is not a concern in order to allow the processor to operate “normally” and throttling a processor speed rather than running a processor fan during times when the system is scheduled to enter a power save mode so that power consumption can be minimized.

15. Referring to claim 17, in addition to operating in a normal and power save mode, Yamanaka further teaches operating in a quiet mode when CPU cooling is performed by clock throttling rather than utilizing the CPU fan [abstract]. A quiet mode is interpreted as a silence mode since both are intended to reduce noise.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (571) 272-3666. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

³ As cited in the previous office action.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark Connolly
Examiner
Art Unit 2115

mc
March 12, 2007

